

## WHAT IS CLAIMED IS:

1. A lighting apparatus having lamps mounted on an upper part thereof and adapted to emit light of three wavelengths, and a socket coupled to a lower part thereof, the lighting apparatus comprising:

5 an anion generator centrally mounted on the upper part of the housing, the anion generator having a coating layer coated with titanium dioxide serving as a photocatalyst so as to perform air purification; and

a metal fiber brush mounted in the anion generator, the brush including numerous metal fibers, each of the metal fibers being formed on an outer surface thereof with numerous tiny projections, each of the projections having a sharp tip.

10

2. A circuit of a lightning apparatus having lamps for emitting light of three wavelengths to generate anions and purify the air, the circuit receiving AC electric power, the circuit comprising:

an interference protection unit for receiving the AC electric power and preventing the ballast and the ion generator from interfering with each other;

15

an ion generation voltage induction unit for converting the AC electric power applied to the interference protection unit into DC electric power of  $-5$  KV and generating pulses with a frequency multiplied by an integer ratio by a diode-capacitor multiplier; and

a metal fiber brush for receiving current from the ion generation induction unit.